

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND
INTERFERENCES**

Application Serial No: 09/977,552)
Filing Date: October 15, 2001)
Applicants: Hank E. Millet, et al.) **Reply Brief**
Examiner: Charles Grant Freay)
Group Art Unit: 3746)
Title: COMPRESSOR CONTROL)
AND COMMUNICATION)
SYSTEM)
Attorney Docket No: 0315-000487/DVA)

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REPLY BRIEF ON BEHALF OF APPELLANTS

This Reply Brief is filed under 37 C.F.R. § 41.41 in reply to the Examiner's
Answer mailed December 17, 2009.

I. THE EXAMINER'S PURPORTED CONSTRUCTION OF THE TERM "IMAGE" CONTRADICTS THE SPECIFIC LIMITATIONS OF CLAIM 69

It appears that part of the reason for disagreement in this appeal can be traced back to the “confusion” raised by the Examiner’s Answer with respect to the term “image.” On this point, the Examiner states as follows:

The examiner believes the specific definition of what an “image” is has been confused. As set forth above and as previously and repeatedly set forth by the examiner during prosecution, an “image” of data is any representation of the data. An ‘image’ is not required to have a plurality of data elements or to be a representation of the whole memory.

See Examiner’s Answer, p. 12 (emphasis added).

While an image, generally speaking, may not be required to have a plurality of data elements or to be a representation of the whole memory, the “first image” and the “new image” of configuration data recited by claim 69 are *particularly defined* to include the *specifically recited data elements* of “compressor identification data, compressor application data, compressor event history data, and compressor control data including at least one compressor set point and at least one compressor pressure limit.”

In other words, while an image, in general, may not be required to have a plurality of data elements, *the images recited by claim 69 are, in fact, required to have a plurality of data elements – namely, the specific data elements recited and defined by the claim.*

The Examiner’s improper generalization that “[a]n ‘image’ is not required to have a plurality of data elements or to be a representation of the whole memory” is contrary to the explicit limitations of claim 69 which define the particular data elements of the recited images.

Further, the Examiner points out that claim 69 does not recite a “full image” and that “reference to a ‘full image’ does not mean that the entire memory is copied.” See Examiner’s Answer, p. 19.

Appellants note, however, that in claim 69 the system master sends a single *configuration data request* to the control block. In response to *that configuration data request*, the system master receives from the control block a copy of the first image of configuration data, having all of the *specifically recited data elements* discussed above. In other words, in response to a configuration data request from the system master, the control block sends a copy of the first image with all of the recited data elements.

While the Examiner is correct that the claim does not recite the term “full image,” the claim nonetheless specifically recites the particular data elements that are present in the first image, the copy of the first image sent to the system master, and the new image sent back to the control block. For this reason, the Examiner’s comments that the claim does not recite a “full image” are inapposite.

II. THE EXAMINER’S ANSWER HIGHLIGHTS THE ACKNOWLEDGED DIFFERENCES BETWEEN CLAIM 69 AND THE PRIOR ART

At base, the Examiner’s argument boils down to the following statement regarding a proposed modification of the Centers reference:

“Thus the examiner finds that it would have been obvious to provide whatever group of data which the system operator finds necessary for a particular application to the system master in a single image or data group in order to reduce the number of data transmissions and simplify the process.”

See Examiner’s Answer, p. 11 (emphasis added).

The Examiner, however, has failed to establish a proper motivation for making the proposed modification of the Centers reference, especially where (1) the proposed modification of Centers would render the Centers reference unfit for its intended purpose and (2) the Examiner's rejection suffers from Hindsight analysis. See Appellants' Brief, Section IX.1.B., p. 22 and Section IX.1.C., p. 26 and Sections III and IV, *infra*.

As discussed above and in Appellants' Brief, one key feature of the apparatus recited by claim 69 is that the system master issues a *configuration data request* to the control block and, in response to that *configuration data request*, receives from the control block a copy of the *first image of the configuration data* with the specifically recited data elements discussed above.

After receiving the copy of the first image, the system master constructs "a new image of configuration data for the compressor." The new image also includes the specifically recited data elements. The system master then sends the constructed new image, with all of the specifically recited data elements, to the control block. The control block receives the new image from the system master and stores the new image in the memory in place of the first image.

As detailed in the Examiner's Answer, the Examiner agrees that the apparatus of claim 69, and the particular features discussed above, are not specifically shown by Centers. For example, the following Examiner admissions with respect to the differences between the apparatus of claim 69 and the prior art are important to the analysis on this appeal:

- "Centers also does not specifically state that the system master makes [a] 'request' to the control block for an image containing the

- noted information or set forth that the modified or new image is sent back to the control block and stored in said memory in place of the first image." Examiner's Answer, p. 6.
- "The difference with the applicant's claimed invention, in particular claim 69, is that the image is specified as including a list of specific compressor configuration variables and data elements." Examiner's Answer, p. 11 (emphasis added).
 - "... Centers does not specifically teach performing these operations with the configuration data set enumerated in claim 69." Examiner's Answer, p. 11.

While the Examiner agrees that Centers does not teach requesting, sending, or receiving an image containing all of the specifically recited data elements of claim 69, the Examiner argues that the system master of Centers *has access* to all of the information stored in the Centers memory and that using an image containing all of the specifically recited data elements of claim 69 would have been obvious. See Examiner's Answer, p. 11.

The Examiner essentially argues that it would have been obvious to modify Centers to create an image containing "whatever group of data," as necessary, and to request, send, and receive that image. See Examiner's Answer, p. 11. As discussed in more detail in the sections that follow, the Examiner has failed to establish a proper motivation for making such a modification of the Centers reference where (1) the proposed modification of Centers would render the Centers reference unfit for its intended purpose and (2) the Examiner's rejection suffers from Hindsight analysis.

**III. THE EXAMINER'S PROPOSED MODIFICATION OF THE CENTERS
REFERENCE WOULD RENDER THE CENTERS REFERENCE UNFIT FOR
ITS INTENDED PURPOSES**

As discussed in Appellants' Brief, Centers is directed to a communication system that permits remote access of compressor operating parameters for purposes of "real time operations monitoring," "maintenance and service diagnosis," "fine tuning," "optimization," and "evaluation." Centers, Col. 14, line 64 - Col. 15, line 2. To use the example in the Examiner's Answer, the service person may be called in to diagnose a particular issue, which is hypothetically linked to Data Element A. The service person would only be concerned with the Data Element A and would not require an entire "image of configuration data" as the Examiner seems to suggest. See Examiner's Answer, p. 19.

For this very reason, the Examiner's proposed modification would render the Centers system unsatisfactory for its intended purpose. In other words, a service person monitoring, diagnosing, and fine tuning the compressor system would prefer to access only the relevant parameters. As the Examiner points out, on one day the serviceperson may require Data Elements A, B, and C, but may also decide that Data Element D is important. See Examiner's Answer, p. 19. Accordingly, for the monitoring and fine tuning of the parameters, it would be advantageous for the service person to be able to decide which parameters are needed instead of having a predefined structure transmitted to his remote location. Thus, the ability to access the data elements individually as needed is advantageous when monitoring and fine tuning a compressor system.

Modifying Centers such that the entirety of the data structure be transmitted and reconstructed would be excessive, given that fine tuning and optimizing are the stated goals. Instead, the service person would prefer a more dynamic, real-time approach to perform the maintenance, fine tuning, and optimization.

To meet the stated goal of fine tuning and optimizing, Centers describes only remotely accessing the individual data fields piecemeal. The Examiner argues that Centers describes transmission of plural data elements. See Examiner's Answer, p. 17. For example, the Examiner argues that the Centers description of "compressor package parameters" is a description of "plural data elements." See Examiner's Answer, 17. While it is true that a compressor package of parameters may include plural data elements, nowhere does Centers describe sending an entire image of the compressor package of parameters in response to a single configuration data request. Rather, a service person using the Centers system would have to make any modification to the compressor package of parameters individually.

The Examiner also argues that Appellants have admitted "that the data image sent to the system master [in Centers] includes plural data elements" by referring to "specific parameters under evaluation." See Examiner's Answer, p. 19. The Examiner has mischaracterized Appellants' statements. *Nothing in Appellants statements can be construed as an admission that Centers sends an entire image of plural specific parameters under evaluation in response to a single configuration data request, as characterized by the Examiner.* While a service person in Centers may reference multiple pieces of data, the service person in Centers would gain remote access to those pieces of data individually. This would be in line with the stated goal of fine tuning

or optimizing, as the service person would not want to request or receive an entire image of all configuration data of the compressor when only the specific parameters under evaluation are of concern.

Thus, the Examiner's proposed modification to the Centers reference would render it unsatisfactory for its intended purposes. See MPEP § 2143.01 ("If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification" and "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious").

IV. THE EXAMINER'S REJECTION SUFFERS FROM HINDSIGHT ANALYSIS

As discussed in Appellants' Brief, the system master of claim 69 constructs a new image of configuration data, with the specifically recited data elements, for the compressor and sends the new image to the control block, which in turn stores the new image in the memory. This provides a marked advantage when, for example, configuring a replacement compressor or initializing a compressor. See Appellants' Brief, p. 27. As noted in Appellants Brief, and as noted by the Examiner, use of an image of configuration data would reduce the computational complexity of the system and ensure that the configuration data is accurate. See Appellants' Brief, p. 27 *citing* Office Action, 10/22/2008, p. 5.

In response, the Examiner argues that, while these are advantages of Appellants' invention, they were not explicitly set forth in the Appellants' disclosure as such. As a

result, the Examiner argues that such advantages can, apparently, be used as part of the motivation to modify the Centers reference.

Appellants respectfully submit that, regardless of whether all of the advantages of Appellants' invention were explicitly set forth in the disclosure, the Examiner has, nonetheless, read the teachings and advantages of Appellants' invention into the prior art and succumbed to hindsight analysis to support the obviousness rejection. In other words, the Examiner has given in to the temptation to read Appellants' teachings into the prior art and has slipped into hindsight analysis. See e.g. *Graham et al. v. John Deere Co. of Kansas City*, 383 US 1, 36 (1966). Appellants, therefore, respectfully request reconsideration and reversal of the rejection of claim 69 and the claims depending therefrom.

V. THE EXAMINER'S REJECTION OF CLAIM 32 IGNORES THE SPECIFICALLY RECITED ELEMENTS OF THE "NEW IMAGE"

The recited features of claim 32 further highlight the distinction between merely modifying parameters individually, as taught by Centers, and constructing a new image of configuration data having specifically recited data elements. The Examiner argues that:

If during maintenance the serviceperson determined after viewing the image transmitted to the system master that a new compressor was required to replace the old compressor then he would replace the compressor and update the configuration data including the compressor identification data for the new replacement compressor. After updating the data/modifying the image the new image would be sent back to the control block to initially configure the newly created compressor system.

Examiner's Answer, p. 22.

However, as discussed in detail in the Appellants' Brief, Centers does not teach the creation of a new image of configuration data having the specifically recited data elements.

Further, in analyzing claim 32, the Examiner hypothesizes on what a serviceperson using the Centers described system may do, as opposed to what is *actually taught* by the Centers reference. The Examiner's assertion that the service person may update/modify the image of the new data is wholly unsupported by the Centers reference. Nowhere does Centers teach or suggest a compressor that is "initially configured by said control block receiving said new image of compressor data from said system master" as recited by claim 32.

As such, the Centers reference cannot be read to teach or otherwise suggest the limitation at issue. Accordingly, reconsideration and reversal of the rejection of claim 32 are requested.

VI. CONCLUSION

For the foregoing reasons, the combination of Centers and Culp fails to render claim 69 or the claims depending therefrom obvious. As such, Appellants respectfully request a complete reversal of the Examiner's rejection of the claims.

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